WHAT IS CLAIMED IS:

- A firearm identification kit comprising:
 a computer readable data storage media in which is stored:
 identifying indicia corresponding to a firearm; and
 at least one image of a spent cartridge case fired by the firearm.
- 2. The kit according to claim 1 further comprising at least one spent cartridge case that has been fired by the firearm.
- 3. The kit according to claim 2 further comprising a protective case for storing the computer readable data storage media and the at least one spent cartridge case.
- 4. The kit according to claim 1, wherein the at least one image is compatible with an automated ballistic matching system.
- 5. The kit according to claim 1, wherein the image is compatible with the National Integrated Ballistic Information Network.
- 6. The kit according to claim 1 in which the data storage media is a non-volatile data storage media.
- 7. The kit according to claim 6, wherein the data storage media comprises an optical disk.
 - 8. The kit according to claim 7, wherein the optical disk cannot be erased.
- 9. The kit according to claim 1, further comprising data for ensuring the integrity of the firearm identification information.
- 10. The kit according to claim 1, wherein the data storage media comprises human readable indicia corresponding to the firearm associated with the kit.

- 11. The kit according to claim 1, wherein the at least one image includes a close-up image of a breech face of a spent cartridge case.
- 12. The kit according to claim 11, wherein the computer readable storage media further includes textual descriptions of the at least one image.
 - 13. A method of identifying a firearm, comprising:

obtaining from the owner of a firearm a computer readable storage media including at least one image of a first spent cartridge case fired by the firearms;

obtaining an image of a second spent cartridge case; comparing the images of the first and second shells; and determining whether the images of the first and second shells match.

- 14. The method according to claim 13, wherein obtaining the image of the spent cartridge case comprises selecting an image from a plurality of images of spent cartridge cases.
 - 15 A gun kit, comprising:
 - a firearm; and
- a digital media on which is stored at least one image of a cartridge case fired by the firearm.